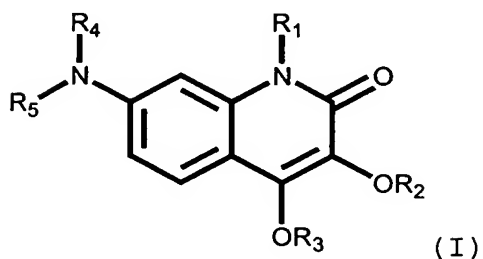


## CLAIMS

1. A therapeutic agent for chronic obstructive pulmonary disease comprising, as an active ingredient, at least one of a 7-aminoquinolinone derivative represented by the general formula (I):



wherein  $R_1$  represents a hydrogen atom or an alkyl group;  $R_2$  and  $R_3$  each represents a group selected from a hydrogen atom, an acyl group, an alkyl group and an alkenyl group; and  $R_4$  and  $R_5$  each represents a group selected from a hydrogen atom, an acyl group, an alkyl group, an alkenyl group and an aralkyl group, and its physiologically acceptable salt.

2. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein  $R_1$  represents a hydrogen atom, or a linear or branched alkyl group having 1 to 10 carbon atoms.

3. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein  $R_2$  and  $R_3$  each represents a hydrogen atom, an acyl group, a linear or

branched alkyl group having 1 to 10 carbon atoms, or a linear or branched alkenyl group having 2 to 10 carbon atoms.

4. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein  $R_4$  and  $R_5$  each represents a hydrogen atom, an acyl group, a linear or branched alkyl group having 1 to 10 carbon atoms, a linear or branched alkenyl group having 2 to 10 carbon atoms, or an aralkyl group.

5. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein  $R_1$  represents a hydrogen atom, or a linear or branched alkyl group having 1 to 10 carbon atoms;  $R_2$  and  $R_3$  each represents a hydrogen atom, an acyl group, a linear or branched alkyl group having 1 to 10 carbon atoms, or a linear or branched alkenyl group having 2 to 10 carbon atoms; and  $R_4$  and  $R_5$  each represents a hydrogen atom, an acyl group, a linear or branched alkyl group having 1 to 10 carbon atoms, a linear or branched alkenyl group having 2 to 10 carbon atoms, or an aralkyl group.

6. The therapeutic agent for chronic obstructive pulmonary disease according to claim 5, wherein  $R_2$  represents a hydrogen atom, and  $R_3$  represents a linear or branched alkyl

group having 1 to 10 carbon atoms, or linear or branched alkenyl group having 2 to 10 carbon atoms.

7. The therapeutic agent for chronic obstructive pulmonary disease according to claim 5, wherein  $R_2$  represents a linear or branched alkyl group having 1 to 10 carbon atoms, or a linear or branched alkenyl group having 2 to 10 carbon atoms, and  $R_3$  represents a hydrogen atom.

8. The therapeutic agent for chronic obstructive pulmonary disease according to any one of claims 6 to 7, wherein  $R_4$  represents a hydrogen atom, and  $R_5$  represents a hydrogen atom, an acyl group, a linear or branched alkyl group having 1 to 10 carbon atoms, a linear or branched alkenyl group having 2 to 10 carbon atoms, or an aralkyl group.

9. The therapeutic agent for chronic obstructive pulmonary disease according to claim 8, wherein  $R_5$  represents an acyl group.

10. The therapeutic agent for chronic obstructive pulmonary disease according to claim 9, wherein  $R_5$  represents an acyl group comprising a cinnamoyl group which may have a substituent.

11. The therapeutic agent for chronic obstructive pulmonary disease according to claim 10, wherein  $R_5$  represents a 4-hydroxy-3-methoxycinnamoyl group or a 3,5-dimethoxy-4-hydroxycinnamoyl group.

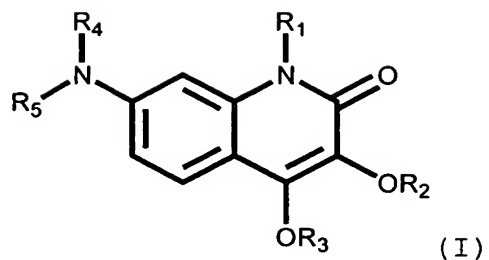
12. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein the chronic obstructive pulmonary disease is chronic bronchitis.

13. The therapeutic agent for chronic obstructive pulmonary disease according to claim 1, wherein the chronic obstructive pulmonary disease is pulmonary emphysema.

14. Use of the therapeutic agent for chronic obstructive pulmonary disease according to claim 1 for treating chronic obstructive pulmonary disease.

15. A method for treating chronic obstructive pulmonary disease, which comprises using the therapeutic agent for chronic obstructive pulmonary disease according to claim 1.

16. Use of at least one of a 7-aminoquinolinone derivative represented by the general formula (I);



wherein  $R_1$  represents a hydrogen atom or an alkyl group;  $R_2$  and  $R_3$  each represents a group selected from a hydrogen atom, an acyl group, an alkyl group and an alkenyl group; and  $R_4$  and  $R_5$  each represents a group selected from a hydrogen atom, an acyl group, an alkyl group, an alkenyl group and an aralkyl group, and its physiologically acceptable salt, for preparing a therapeutic agent for chronic obstructive pulmonary disease.